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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,653	08/26/2005	Klaus Dieter Liedtke	0745/73621/NHZ	7422

7590 11/14/2008
Norman H Zivin
Cooper & Dunham
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

ABEBE, DANIEL DEMELASH

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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11/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,653	Applicant(s) LIEDTKE ET AL.	
	Examiner Daniel D. Abebe	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,4-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (7,050,977).

As to claim 1, Bennett teaches a method for natural language recognition based on a generative phrase structure grammar, comprising the steps of:

Analyzing a spoken phrase for phonemes contained therein;

Forming words from the recognized phonemes using a word dictionary;

Syntactically reconstructing the spoken phrase using a grammar, including

Allocating/tagging or associating the words with part of speech categories including noun, verb etc (Col.34, lines 25-65)..

Allocating/assigning the part of speech with minimal noun and verb phrase categories;

Combining/grouping the phrases according to a syntactic rule into an object/array list having sequence of part of speech categories (Col.35, line 33-35

Comparing the sequences of the part of speech with plurality of stored candidate sentences of part of speech categories in order to select one and performing an action accordingly (Figs. 8-11; Col.7, line 55-Col.8, line 3; Col.6, lines 50-55; Col.7, lines 30-

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40; Col.15, lines 15-25; Col.17, lines 50-65; Col.25, lines 25-52; Col.27, lines 46-50; Col.33, lines 45-60; Col.34, lines 20-25).

It is noted that Bennett doesn't analyze the words for the triphones contained in them. Official Notice is taken that using triphone model is well known in the art of speech recognition and would have been obvious in Bennett's teaching for improving the recognition of the word by taking contextual relationship of sequences of phonemes contained in the word.

As to claims 4-5, Bennett teaches where dictionary words to be recognized are stored for use by a tokenizer and where they are linked to action once recognized (Figs.4, 10).

Response to Arguments

Applicant's arguments filed 7/03/08 have been fully considered but they are not persuasive.

The examiner disagrees with applicant's assertion suggesting Bennett doesn't teach comparing the sequence of the object having part of speech categories with predetermined sentence model.

According to Bennett, the phrase analyzing process performed by the tokenizer generates tokens from the input text where the tokens are assigned to part of speech (syntactic) tagger and where the tagger syntactically classifies the phrase as part of speech value such as noun, verb etc. Bennett also teaches allocating part of speech categories to different types of noun phrases and verbal phrases and where these phrases are syntactically grouped into user articulated candidate questions (sentences)

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for comparison. Also, According to Bennett after the phrases are syntactically categorized with part of speech information, lists of noun phrases and possibly verbal phrase sentence are extracted from the user's question while on the other hand the routine retrieves a noun phrase list from the list of a corresponding candidate syntactic sentence/question and a match is performed between the phrases articulated by the user and the candidate sentences (model)..

For this reasons, in addition to the reasons provided in the final office action, the examiner submits that the claimed invention is anticipated by Bennett and maintain the rejection. The examiner has withdrawn the Young patent as the context based triphone model are well known in the art and are an obvious alternative to the phoneme model used in Bennett art

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Abebe whose telephone number is 571-272-7615. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel D Abebe/
Primary Examiner, Art Unit 2626